

### ABSTRACT

Leakage currents across circuit components such as transistors are avoided by placing circuits into a low-leakage standby mode. The circuits are configured such that voltage differentials across leakage-prone circuit components are avoided when in standby mode. Various means are used to configure the circuits, such as configuration ports, data input lines, scan chains, etc. In embodiments containing reconfigurable devices, low-threshold transistors are used to implement the routing network.